

REMARKS

In response to the Office Action mailed August 12, 2003, Applicants respectfully request reconsideration. Claims 1-85 are pending in this application. Claims 62, 63, 65, 68, 69, 71, 74, 75, 77, 80, 81, and 83 are amended herein and the claims are believed to be in allowable condition.

Claims 1 and 37 stand rejected under 35 U.S.C. §103(a) as purportedly being obvious over Chen (6,041,345) in view of Bormann (6,157,378). Claims 2-36 and 38-61 stand rejected under 35 U.S.C. §103(a) as purportedly being obvious over Chen in view of Bormann and further in view of Jacoby (5,768,552). Finally, claims 62-85 stand rejected under 35 U.S.C. §103(a) as purportedly being obvious over Chen in view of IBM Technical Disclosure Bulletin (TDB) No. NB9203306 (IBM TDB). Each of these rejections is respectfully traversed.

The Combination of References is Improper**A. The Combination of Chen and Bormann**

One of ordinary skill in the art would not have been motivated to combine Chen and Bormann. The Office Action asserts that Chen discloses that network components can log into a storage system, but fails to disclose any management features to monitor access to the storage device 180. (Final Office Action, page 2). The Office Action concludes that one of ordinary skill in the art would have been motivated to look for a teaching of monitoring and managing logon activities on the storage device. (Final Office Action, page 3).

It is respectfully asserted that the Office Action uses improper hindsight in the rejection of Applicants' claims. The prior art of record does not teach or suggest monitoring host processors logged into a storage system. The Office Action uses Applicants' own disclosure (which teaches monitoring host processors logged into a storage system) as a basis for asserting that one of skill in the art would have been motivated to incorporate such monitoring features in the system of Chen. Such an assertion is an improper use of hindsight, and the rejection of claims 1-61 under 35 U.S.C. §103(a) over Chen and Bormann, either alone or further in view of Jacoby, should be withdrawn.

Further, even if one of skill in the art would have been motivated to look for a teaching “to monitor and manage logon activities on the storage device 180,” the combination of Chen and Bormann is still improper as Bormann does not teach monitoring and managing logon activities on a storage device. Rather, Bormann discloses a GUI that identifies operators logged into a network switch. Bormann does not disclose monitoring or managing a storage system in any respect. As Bormann is entirely unrelated to storage systems, one of ordinary skill in the art would not have been motivated to combine Bormann with a reference directed to remote storage for an internet appliance (i.e., Chen). Therefore, the combination of Chen and Bormann is improper, and the rejection of claims 1-61 under 35 U.S.C. §103(a) over this combination should be withdrawn.

B. The Combination of Chen and the IBM TBD

The Office Action asserts that it would have been obvious for one of skill in the art to combine the GUI disclosed in the IBM TBD with Chen “because it would have provided means to administer the system from a graphical user interface and prevented the administrator from having to know or remember commands or syntax to accomplish the task.” (Final Office Action, page 7).

It is generally accepted that GUIs may be used to “administer a system from a graphical user interface” and to obviate the need for a user of the GUI to “know or remember commands or syntax to accomplish the task.” These are well known features of GUIs. However, simply because GUIs may provide some advantages over other types of interfaces does not mean that one of skill in the art would have been motivated to use a GUI in every situation. Indeed, other interfaces, such as a command line interface (CLI), may be better suited for some systems.

There is no disclosure or suggestion in Chen that a GUI should be used to control access to the storage device. Further, there is no disclosure or suggestion in the IBM TBD that the graphical user interface for administration of security objects may be used for controlling access to a storage system.

Because the only access control to the storage device disclosed in Chen is the use of a username and password, one of ordinary skill in the art would not have been motivated to use the complex graphical user interface for displaying visual representations of security objects in a

distributed computing environment (disclosed by the IBM TBD) with the system of Chen. Indeed, the IBM TBD discloses that the GUI allows an administrator to “change the object definitions required for a distributed security system to run.” The Office Action fails to explain how this GUI is applicable to the non-distributed computing environment of Chen, which has no use for such object definitions.

For the reasons discussed above, the combination of Chen and the IBM TBD is improper. Accordingly, the rejection of claims 62-85 under 35 U.S.C. §103(a) over Chen and the IBM TBD should be withdrawn.

The Claims Patentably Distinguish Over the Combination

A. Claims 1-61

Even if the combination of Chen and Bormann under 35 U.S.C. §103(a) were proper, each of claims 1-61 patentably distinguishes over the asserted combination because the asserted combination does not identify each of the plurality of host processors that is logged into the storage system as being logged into the storage system, as recited in each of independent claims 1 and 37.

Claim 1 is directed to a computer readable medium encoded with a program for execution on a computer system that includes a plurality of host processors coupled to a storage system over a network. The program, when executed on the computer system, performs a method comprising a step of displaying a first representation of each of the plurality of host processors that is logged into the storage system over the network, wherein the first representation identifies each of the plurality of host processors that is logged into the storage system as being logged into the storage system.

Although the Office Action cites various portions of Chen and Bormann, the Office Action provides no detail on what type of system would purportedly result from the asserted combination of Chen and Bormann. However, the combination of Chen and Bormann would yield a system which performs two separate and unrelated functions. In this respect Chen and Bormann are directed to completely unrelated parts of a computer system. That is, combining Chen and Bormann would be like combining a first reference that discloses an automobile engine

with a second reference that discloses automobile brakes. The combination of references would result in a car that has the engine disclosed by the first reference and the brakes disclosed by the second reference. Likewise, one skilled in the art following the unrelated teachings of Chen and Bormann would end up with a system that would allow users to log in to a storage device over a network (as taught by Chen) and switches in the network would have a graphical user interface that may display which operators are logged into those switches (as taught by Bormann). That is, the resulting system would be one having the storage device of Chen and the network switches of Bormann.

The resulting system would not perform an act of “displaying a first representation of each of the plurality of host processors that is logged into the storage system over the network, wherein the first representation identifies each of the plurality of host processors that is logged into the storage system as being logged into the storage system,” as recited in claim 1.

Thus, claim 1 patentably distinguishes over Chen and Bormann. Accordingly, it is respectfully requested that the rejection of claim 1 under 35 U.S.C. §103(a) be withdrawn. Claims 2-36 depend from claim 1 and are patentable for at least the reasons discussed above in connection with claim 1.

Claim 37 is directed to a method for use in a computer system having a plurality of host processors coupled to a storage system over a network. The method comprises a step of displaying, on a display in the computer system, a first representation of each of the plurality of host processors that is logged into the storage system over the network, wherein the first representation identifies each of the plurality of host processors that is logged into the storage system as being logged into the storage system.

As should be clear from the foregoing, the asserted combination of Chen and Bormann does not disclose or suggest “displaying a first representation of each of a plurality of host processors that is logged into the storage system as being logged into the storage system.”

Thus, claim 37 patentably distinguishes over Chen and Bormann. Accordingly, it is respectfully requested that the rejection of claim 37 under 35 U.S.C. §103(a) be withdrawn. Claims 38-61 depend from claim 37 and are patentable for at least the reasons discussed above in connection with claim 37.

B. Claims 62-85

Even if the combination of Chen and the IBM TBD under 35 U.S.C. §103(a) were proper, each of claims 62-85 patentably distinguishes over the asserted combination, because the asserted combination fails to disclose or suggest steps of displaying access privileges to the first volume of data and modifying the access privileges to the first volume of data...without modifying the access privileges to the second volume of data.
as recited in each of independent claims 62, 68, 74 and 80.

With respect to the rejection of claims 62-85, the Office Action asserts that Fig. 2 and column 5, lines 5-15 of Chen discloses a method for changing access privileges to a portion of data on a storage system over a network. The Office Action concedes that Chen does not teach a graphical user interface for displaying and enabling modification of the privileges in response to a graphical selection, but asserts that the IBM TDB teaches a graphical user interface for security administration.

Claim 62 is directed to a computer readable medium encoded with a program, that, when executed on a computer system that includes a plurality of host processors that are coupled to a storage system over a network, performs a method, the storage system storing at least first and second volumes capable of having different access privileges. The method includes steps of displaying access privileges to the first volume of data stored on the storage system and modifying the access privileges to the first volume of data by one of the plurality of host processors in response to a graphical selection of the graphical representation of the first volume of data without modifying the access privileges to the second volume of data.

Neither Chen nor the IBM TBD discloses, teaches, or suggests modifying the access privileges to a first volume of data by one of the plurality of host processors in response to a graphical selection of the graphical representation of the first volume of data without modifying the access privileges to a second volume of data, as recited in claim 62. Chen does not even state that the storage device stores multiple volumes. In addition, the only access control disclosed by Chen is a user name and password, which allow access to the entire storage device. The user name and password do not relate to access privileges for accessing volumes of data on the storage device. To the extent that the user name and password can be considered to relate to access privileges, those privileges apply to the storage device itself, so that those privileges

would relate to all volumes on the device. Thus, even if the user name and password can be considered to relate to access privileges for volumes, Chen still fails to disclose or suggest the notion of modifying access privileges to a first volume without modifying access privileges to a second volume.

The IBM TBD also fails to disclose modifying the access privileges to the first volume of data by one of the plurality of host processors in response to a graphical selection of the graphical representation of the first volume of data without modifying the access privileges to the second volume of data, as recited in claim 62. While the IBM TBD discloses a graphical user interface that may be used to change object definitions used in a distributed security service, the IBM TBD fails to disclose or suggest controlling access privileges to volumes of data stored on a storage system.

Thus, claim 62 patentably distinguishes over Chen and the IBM TBD. Accordingly, it is respectfully requested that the rejection of claim 62 under 35 U.S.C. §103(a) over this combination be withdrawn. Claims 63-67 depend from claim 62 and are patentable for at least the reasons discussed above in connection with claim 62.

Claim 68 is directed to a method of managing access to data storage on a storage system from a plurality of host processors that are coupled to the storage system over a network, the storage system storing at least first and second volumes of data capable of having different access privileges. The method includes a step of modifying the access privileges to the first volume of data by one of the plurality of host processors in response to a graphical selection of the graphical representation of the first volume of data without modifying the access privileges to the second volume of data.

As should be clear from the discussion above in connection with claim 62, claim 68 patentably distinguishes over the asserted combination of Chen and the IBM TBD, as neither reference discloses or suggests modifying the access privileges to a first volume of data by one of the plurality of host processors in response to a graphical selection of the graphical representation of the first volume of data without modifying the access privileges to a second volume of data.

Accordingly, it is respectfully requested the rejection of claim 68 under 35 U.S.C. §103(a) be withdrawn. Claims 69-73 depend either directly or indirectly from claim 68 and

patentably distinguish over the combination of Chen and the IBM TDB for at least the same reasons.

Claim 74 is directed to a computer readable medium encoded with a program that, when executed on a computer system including a plurality of host processors that are coupled to a storage system over a network, performs a method, the storage system storing at least first and second volumes of data capable of having different access privileges. The method includes a step of modifying the access privileges to the first volume of data by the one of the plurality of host processors in response to a graphical selection of the graphical representation of the one of the plurality of host processors without modifying the access privileges to the second volume of data.

As should be clear from the discussion above in connection with claims 62 and 68, neither Chen, the IBM TDB, nor the asserted combination of Chen and the IBM TDB discloses or suggests a step of “modifying the access privileges to the first volume of data by the one of the plurality of host processors in response to a graphical selection of the graphical representation of the one of the plurality of host processors without modifying the access privileges to the second volume of data,” as recited in claim 74.

Accordingly, claim 74 patentably distinguishes over the asserted combination of Chen and the IBM TDB, and thus, the rejection under 35 U.S.C. §103(a) based thereon should be withdrawn. Claims 75-79 depend either directly or indirectly from claim 74 and patentably distinguish over the combination of Chen and the IBM TDB for at least the same reasons.

Claim 80 is directed to a method of managing access to data stored on a storage system from a plurality of host processors that are coupled to the storage system over a network, the storage system storing at least first and second logical volumes capable of having different access privileges. Claim 80 recites a step of modifying the access privileges to the first volume of data by the one of the plurality of host processors in response to a graphical selection of the graphical representation of the one of the plurality of host processors without modifying the access privileges to the second volume of data.

As should be clear from the discussion above in connection with claims 62, 68, and 74 neither Chen, the IBM TDB, nor the asserted combination of Chen and the IBM TDB discloses or suggests a step of “modifying the access privileges to the first volume of data by the one of

the plurality of host processors in response to a graphical selection of the graphical representation of the one of the plurality of host processors without modifying the access privileges to the second volume of data," as recited in claim 80.

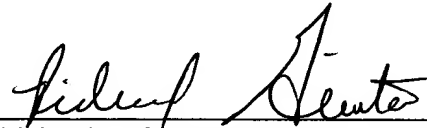
Accordingly, claim 80 patentably distinguishes over the asserted combination of Chen and the IBM TDB, and thus, the rejection under 35 U.S.C. §103(a) based thereon should be withdrawn. Claims 81-85 depend either directly or indirectly from claim 80 and patentably distinguish over the combination of Chen and the IBM TDB for at least the same reasons.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes after this Amendment that the application is not in condition for allowance, the Examiner is requested to call Applicants' attorney at the number listed below to discuss any outstanding issues relating to allowability.

If this response is not considered timely filed, and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by the enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,



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Attorney's Docket No.: E0295.70097.US
Dated: October 14, 2003